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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 22 1983

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Follow-up to Methyl Bromide Registration Standard.
Alternative Methodology for the Analysis of Inorganic
Bromide Proposed by the California Raisin Advisory
Board. RCB No. 4148

FROM: Cynthia Deyrup, Ph.D., Chemist *C. Deyrup*
Dietary Exposure Branch
Health Effects Division (TS-769)

THRU: Charles L. Trichilo, Ph.D., Chief
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TO: Jeffrey Kempter, Product Manager No. 32
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and

Toxicology Branch
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The California Raisin Advisory Board had originally proposed to analyze inorganic bromide (iBr) by a method using an ion selective electrode. The present submission (from Heron, Burchette, Ruckert & Rothwell on behalf of the Board) proposes to analyze iBr by a method using X-ray fluorescence spectrophotometry. This change was necessitated because the Board intends to use a different laboratory.

Recommendations

DEB cannot judge the validity of the proposed method for determining iBr; fortification and recovery data, calibration curves, and sample calculations are required.

Detailed Considerations

The Board has submitted the title pages of three articles in which this method was applied. A set of instrument instructions was also submitted.

DEB has no objection to the use of any valid method of analysis in determining iBr. However, the present submission contains no data so that such a judgment can be rendered. The Board will need to submit calibration curves and calculations illustrating the determination of iBr from the curve. The sample calculations should include the application of relevant equations, if any are needed to determine ppm iBr. Fortification and recovery data are also needed to validate the proposed method, and the limit of determination should be established. The residue levels should be reported as individual results rather than as average levels.

The Board also proposes to extrapolate residue data generated on raisins, prunes, almonds and walnuts to cover expected residue levels in figs, dates, pistachios, hazelnuts, pecans, and filberts.

In the meeting of 8/12/88, the Board was told that residue data on pecans are needed to establish a crop group tolerance on tree nuts. At that time, the Board was informed that it would be necessary to find out whether fumigation temperatures in areas where pecans are grown are the same as in CA, where temperatures are not expected to be below 50°F. The Board had informed DEB at this meeting that cooler temperatures lead to higher MeBr levels. The Board was also informed at this meeting that pistachios are not included in the tree nuts group for regulatory purposes because of the split shell; residue data on pistachios should be generated separately. The Board informed DEB that it wanted to establish tolerances on sliced dried fruit too. Since the sliced dried fruit were not included in the current submission, the Board said that they would resubmit a proposal to cover dates, figs, and all cut dried fruit with residue data generated from more limited data.

Therefore, at this time DEB will withhold judgment on the present proposal regarding sliced dried fruit, dates, and figs and will review the amended proposal when it is received.

cc: R. Engler (SACB), Amy Rispin (EFED/SACS), PMSD/ISB, SF,
RF, Reg. Std. File-Boodee, Circu, Reviewer-Deyrup
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